Cervical and Shoulder Examination

Algorithm #1

Suspect 1) Fracture or Loss of Connective Tissue Integrity Due to Trauma or Disease, and/or 2) Abnormal/Hypermobile Cervical Segmental Mobility

- Yes: Stabilization Procedures

- No: Screen for Potentially Serious Non-Musculoskeletal Pathology
  - Yes: Consultation with Appropriate Healthcare Provider
    - Yes: Medical Clearance and Negative Imaging
    - No: Cervical Examination Algorithm #2
  - No: If Negative
    - If Negative: Cervical Examination Algorithm #2
Cervical Examination and Intervention

Algorithm #2

Cervical and Upper Thoracic Single Plane Active Mobility Examination

Pain During Movement or Pain Limits Motion in Available Ranges or Movement Produces Peripheral Symptoms

Consultation with Other Healthcare Providers

Neurological Status Examination

Recovery of Upper Motor Neuron Lesions

Produces Peripheral Symptoms

If Positive for Upper Motor Neuron Lesions

Mobility Examination of:
- Upper Quarter Neural Elements
- Peripheral Nerve Entrapment Sites

Pain Limited Nerve Mobility

Nerve Entrapment Reduction Procedures

If Symptoms Resolve to the Point Where Pain Does Not Limit Motion in Available Range, Return to Single Plane Active Mobility Examination

Pain Limits Motion in Available Ranges and/or Movement Produces Peripheral Symptoms

Pain Does Not Limit Motion

If Safe to Proceed

Cervical Spine Side Bending, and/or Combined Side Bending/Rotation /Extension Over Pressures

Cervical Spine Side Bending, and/or Combined Side Bending/Rotation /Extension Over Pressures

Produce Peripheral Symptoms

Does Not Produce Peripheral Symptoms

If Segmental Instability

Resistance Limited Nerve Mobility

Resistance Limited Cervical Mobility

Resistance Limited Cervical Mobility

Resistance Limited Cervical Mobility

Mobilization of Upper Quarter Neural Elements

Mobilization of Cervical and Thoracic Spinal Segments

To Algorithm #3 Shoulder Examination

If Negative

If Positive

If Negative

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Shoulder Examination and Intervention  Algorithm #3a

Active ROM Tests:
1) Elevation
2) 90/90 or Neutral External Rotation
3) Hand Behind Back

Passive ROM Tests:
1) Elevation with Over Pressure
2) Isolated Glenohumeral External Rotation
3) Isolated Glenohumeral Internal Rotation

Passive Accessory Motion Tests:
1) Posterior Humeral Translation
2) Anterior Humeral Translation
3) Inferior Humeral Translation (sulcus sign)
4) Acromioclavicular Accessory Movements

Resisted Tests:
1) External Rotation
2) Abduction Active Compression
3) Flexion Test

Palpatory Examination of Suspected Enthesopathy

To Algorithm #3b
Algorithm #3b

If Symptoms Unresolved
• First Time Traumatic Dislocation
• Age ≤25 Years Old
Medical/Surgical Consultation in Addition to PT Intervention

Suspect Glenohumeral Capsuloligamentous Labral Tear

• Pain with Active Motions
• Pain with Passive Over Pressure
• Weak and/or Painful Resisted Tests

Suspct Rotator Cuff Tear

• Painful and/or Excessive Humeral Accessory Motions
• Positive Active Compression Tests

Pain Limits Active and Passive Movements in Mid Ranges

• Normal or Excessive Active and Passive Range of Motion
• Painful and/or Excessive Humeral Accessory Motions
• Positive Active Compression Tests

Instability

continuum

If Symptoms Resolve, and Pain No Longer Limits Active and Passive Movements in Mid Ranges, Return to Start of Algorithm #3

Shoulder Strengthening Therapeutic Exercises

Shoulder Strengthening Therapeutic Exercises

Shoulder Mobilization Procedures

Consultation with Other Healthcare Providers

Associated Upper Quarter Impairment Examination Algorithm #4

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Associated Upper Quarter Impairment Examination

Algorithm #4

Physical Agents and Ergonomic Instructions

Shoulder Stabilization Procedures and Therapeutic Exercises

Shoulder Strengthening Therapeutic Exercises

Shoulder Mobilization Procedures

Nerve Entrapment Reduction Procedures

Mobilization of Upper Quarter Neural Elements

Cervical Stabilization Procedures

Mobilization of Cervical and Thoracic Spinal Segments

Deep Neck Flexors

Strength/Motor Control/Endurance Deficits

Lower Trapezius

Middle Trapezius

Serratus Anterior

Levator Scapulae

Upper Trapezius

Suboccipital Myofascia

Flexibility Deficits

Pectoralis Major

Latissimus Dorsi

Teres Major

Pectoralis Minor

Subscapularis

Sternocleidomastoid

Excessive Capital Extension

Postural Deficits

Protracted Scapulae

Excessive Thoracic Kyphosis

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Selected References


